

# Replacement of the South Maple Street Bridge over the Scantic River



### PRESENTED BY:

PIYA HAWKES, P.E. DIRECTOR OF PUBLIC WORKS



JEFFREY A. SCALA, P.E.,
TECTONIC ENGINEERING AND SURVEYING
CONSULTANTS, P.C.









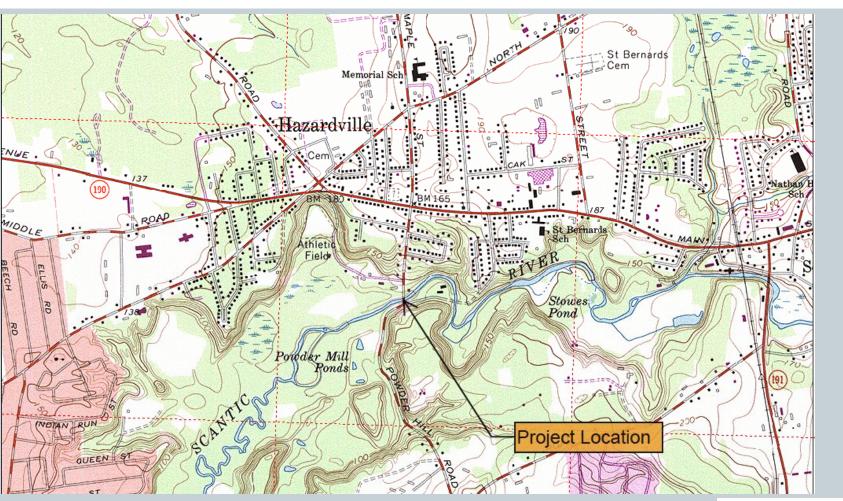








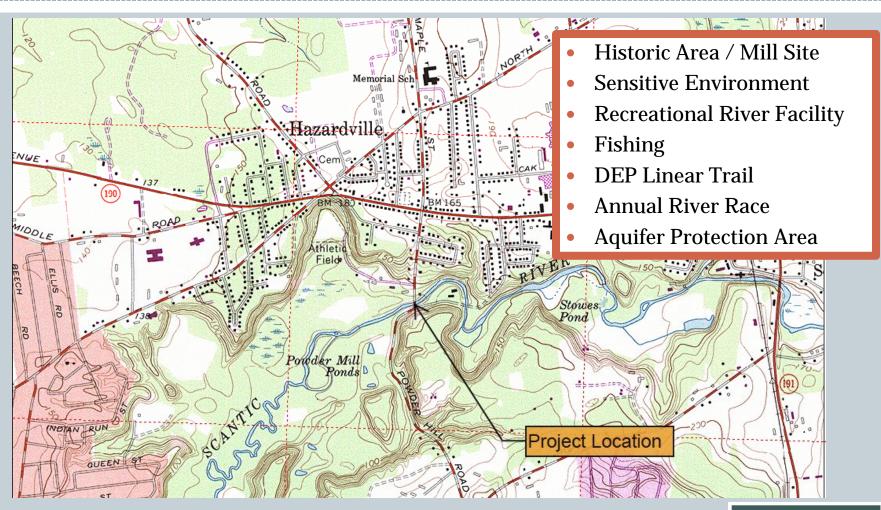
## Location







### Location







## **Existing Bridge**

- Narrow One Lane Bridge
- Original Construction 1925
- Rehabilitated 3 times
- Advanced Deterioration
- NBIS Inspection Report
- Structurally Deficient
- Functionally Deficient
- Load Restricted to Only 8 tons
- Primary Structural Support Elements Ratings
- Deck= 3
- Beams= 3
- Trusses= 3



### **EXISTING ELEVATION VIEW**

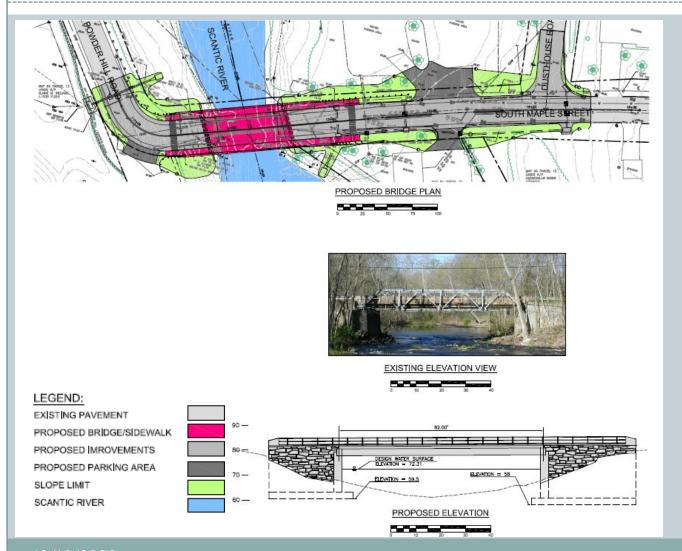








# Proposed



- New Bridge
- Long Lasting
- Minimal Maintenance
- Aesthetic
- Longer span
- Sidewalks
- Shoulders for Bikes
- Rapid Construction Techniques
- Precast Concrete



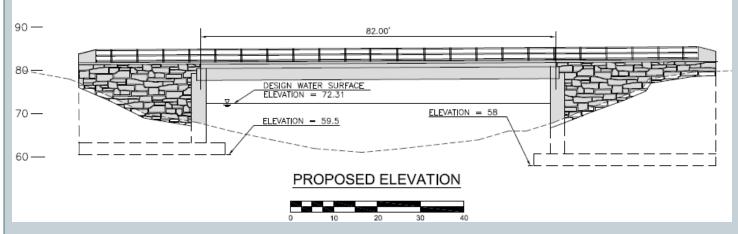


# Proposed



#### **EXISTING ELEVATION VIEW**





- Rights of Way Impacts
- SHPO
- Wetlands FMC Permits
- No Endangered Species Identified
- Hazardous Materials
- Aquifer / Wells
- Utility Conflicts



12/16/2009



## Schedule

Engineering	
Structure Type Study	Completed
Preliminary Roadway And Structure Design	Completed
Final Design Highway	February 2010
Final Structure Plans, Specification And Estimates	February 2010
Structure Layout For Design	Completed
Hydrology Report	Completed
Hydraulic Report	December 2009
Scour Report	December 2009
Flood Plain Management Permit Application -	December 2009
Draft	
ACOE Permit Submission	February, 2010
Rights Of Way Activities	Started Coordination And Negotiations
Utility Coordination And Design	No Impacts,
Permits Approved	April 2010
Contract Documents And Specifications	April 2010
FDP	March 10, 2010





## Schedule

Engineering	
Structure Type Study	Completed
Preliminary Roadway And Structure Design	Completed
Final Design Highway	February 2010
Final Structure Plans, Specification And Estimates	February 2010
Structure Layout For Design	Completed
Hydrology Report	Completed
Hydraulic Report	December 2009
Scour Report	December 2009
Flood Plain Management Permit Application -	December 2009

Draft
ACOE Permit Submi
Rights Of Way Activ
Utility Coordination
Permits Approved
Contract Documents
FDP

101	2/2/12/21/20, 2010
Advertising	the control of the co
Contract Advertising	May 19, 2010
Bid Opening	June 9, 2010
Contract Award	July 1, 2010
Notice To Proceed	July 14, 2010
Advertising for Beams and Precast Elements	
Early Procurement of Beams and Precast Elements	Not later than March 1, 2010
- Advertisement	
Bid Opening	March 19, 2010
Contract Award	April 9, 2010
Notice to Proceed	Not Later Than April 14, 2010
Beams and Precasting Complete and Ready for	July 15, 2010
Delivery	The state of the s





### Schedule

Engineering	
Structure Type Study	Completed
Preliminary Roadway And Structure Design	Completed
Final Design Highway	February 2010
Final Structure Plans, Specification And Estimates	February 2010
Structure Layout For Design	Completed
Hydrology Report	Completed
Hydraulic Report	December 2009
Scour Report	December 2009
Flood Plain Management Permit Application -	December 2009

Draft

ACOE Permit Submi Rights Of Way Activ Utility Coordination . Permits Approved Contract Documents FDP

Advertising	10. (20. (2.20))
Contract Advertising	May 19, 2010
Bid Opening	June 9, 2010
Contract Award	July 1, 2010
Notice To Proceed	July 14, 2010
Advertising for Beams and Precast Elements	
Early Procurement of Beams and Precast Elements	Not later than March 1, 2010
- Advertisement	
Bid Opening	March 19, 2010
Contract Award	April 9, 2010
Notice to Proceed	Not Later Than April 14, 2010

Construction Complete = December 2010





## Questions?



### Send Written Comments to:

Tectonic Engineering Suite 500 1344 Silas Deane Highway Rocky Hill, CT 06067

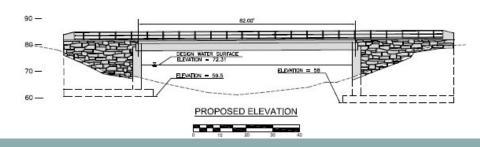
### Or by email to:

### jscala@tectonic engineering.com





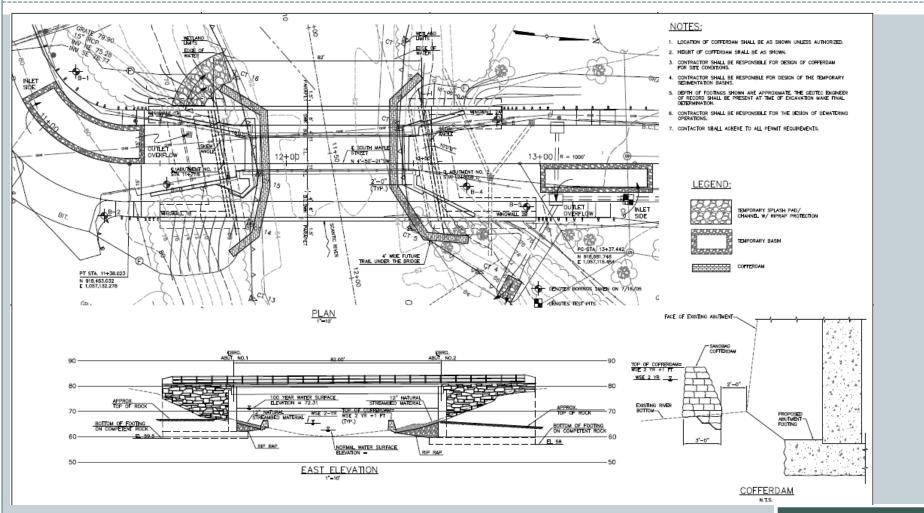
EXISTING ELEVATION VIEW







# Proposed – Construction Staging





# Proposed

General Plan

**Profile** 

**Construction Plan Detail** 

**Cofferdam Steps** 

<u>Drawings</u>



